BRUHATH BENGALURU MAHANAGARA PALIKE

Yelahanka Division, Yelahanka Zone

Executive Engineeer
Yelahanka Division
B.B.M.P. Bengaluru - 64

No:EE/YNK-D/E-PMT/06/2022-23 Dated: 24-06-2022

APPROVED TENDER SCHEDULE –'B'

Item 01

Name of Work :-Improvements to roads, drains and other developmental works at Yelahanka old town, Maruthinagara, Sapthagiri layout Gandinagara KHB colony, Nehru nagara, shivanahalli, PDMS APTS premise and surrounding areas in ward No 01 of Yelahanka Division under Amruth Nagarothan Grants. (PACKAGE No-01)

Sl	Description	Unit	Approved Qty	Rate quoted by the contractor approved rates Sri.RAJESWAREN SATHEESH (SATHYA CONSTRUCTIONS)	
				Rate	Rate in Words
1	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead Dismantling Brick / Tile work In cement mortar.	Cum	20.32	555.67	Five Hundred FiftyFive Paise SixtySeven Only
2	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work.	Cum	3973.78	207.12	Two Hundred Seven Paise Twelve Only
3	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately)Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates	Cum	665.72	6405.28	Six Thousand Four Hundred Five Paise TwentyEight Only
4	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/ trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates.	Cum	4.04	7952.25	Seven Thousand Nine Hundred FiftyTwo Paise TwentyFive Only
5	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications.	Tonne	72.10	115064.49	One Lakh Fifteen Thousand SixtyFour Paise FourtyNine Only

	roviding and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge : ** Flamed finish granite stone slab Black, Cherry Red, Brown, Cat Eye, River Pink or equivalent.	Sqm	32.00	2114.68	Two Thousand One Hundred Fourteen Paise SixtyEight Only
7	Providing and laying flooring and steps machine cut granite slabs 40 mm thick on cement mortar bed 1:6, 25 mm thick, and pointed with cement mortar 1:3 over existing cement concrete bed , including cost of materials, mortar labour, curing complete as per specifications.	Sqm	5.40	2641.40	Two Thousand Six Hundred FourtyOne Paise Fourty Only
8	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	150.09	6037.80	Six Thousand ThirtySeven Paise Eighty Only
9	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) Mix 1:2:4 (M15) Using 20 mm nominal size graded crushed coarse aggregates	Cum	131.35	6788.35	Six Thousand Seven Hundred EightyEight Paise ThirtyFive Only
10	Ruled/ Flush pointing on White sand stone masonry surface with lime, surkhi and marble dust mortar in the ratio of 1:1.5:1/2 {One lime : 1.5 surkhi (15% dark red and 85% light yellow surkhi) : 1/2 marble dust}. (The rate is inclusive of all aterials & labours involved except scaffolding).	Sqm	86.60	214.92	Two Hundred Fourteen Paise NinetyTwo Only
11	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x200x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications.	Sqm	397.32	1338.52	One Thousand Three Hundred ThirtyEight Paise FiftyTwo Only
12	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x100x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications.	Sqm	26.74	1053.44	One Thousand FiftyThree Paise FourtyFour Only
13	Providing 12 mm cement plaster finished with a floating coat of neat cement of mix :1:3 (1 cement: 3 fine sand) to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge.	Sqm	58.51	314.03	Three Hundred Fourteen Paise Three Only

	ding 18 mm cement plaster in two coats under layer 12 mm thick ent plaster with cement mortar 1:5 (1 cement : 5 coarse sand) and a layer 6 mm thick cement plaster with cement mortar 1:3 (1 cement : 3 arse sand) finished rough with sponge to brick masonry including ounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge.	Sqm	826.64	366.37	Three Hundred SixtySix Paise ThirtySeven Only
15	Providing and applying white cement based putty of average thickness 1 mm, of approve brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete as per specifications and as per directions of Engineer in charge.	Sqm	150.55	92.43	NinetyTwo Paise FourtyThree Only
16	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade :New work (two coats) over and including water thinnable priming coat with cement primer after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.	Sqm	150.55	116.93	One Hundred Sixteen Paise NinetyThree Only
17	Finishing walls with Acrylic Smooth exterior paint of required shade :New work (Two coat applied @ 1.67 ltr/10 m^2 over and including priming coat of exterior primer applied @ 2.20 kg/10 m^2) with paint of approved quality to give an even shade, after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.	Sqm	90.59	151.45	One Hundred FiftyOne Paise FourtyFive Only
18	Providing & fixing of 2-track x 2-panel sliding windows made out of multi chambered UPVC (Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free, gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the window frame. The outer frame having an overall size of 50mm width x 42mm height with reinforcement of 1mm thickness and Sash with overall size of 31mm X 57mm with Gi reinforcement of 1mm for the frame and 1.5 mm for the sash. Coextruded Glazing bead for fixing of glass shall be of size 21.5mm x 9.5 mm. Windows shall be provided with 5mm plain float glass, standard hardware& single point locking system with touch lock.	Sqm	3.24	6505.50	Six Thousand Five Hundred Five Paise Fifty Only
19	Providing Mathi/Nandi wood frames of doors, windows, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps), but including cost of materials, labour, usage charges complete as per specifications.	Cum	0.39	83901.12	EightyThree Thousand Nine Hundred One Paise Twelve Only
20	Providing and fixing in position fully panelled Mathi/Nandi wood shutters for doors with stiles and rails of 40mm. thick with bottom and lock rails 180mm wide top rail and stiles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, usage charges complete as per specifications. (excluding cost of fixtures)	Sqm	10.71	5073.44	Five Thousand SeventyThree Paise FourtyFour Only

	g & fixing of louvered ventilator made out of multi chambered Matching to RAL-9016) sections and with minimum Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) lead free with gaskets -grey colour having isolated drainage and forced with Galvanized Iron profile through-out the ventilator frame. e frame having overall size of 39mm x 39mm with GI reinforcement of mm thickness. Louver clip in Aluminium (powder coated in white) will be used on the frame along with plastic parts for fixing the 4 mm pin head glass. Wall thickness of frame shall be 2mm.Maximum possible size – 1000mm x 1000mm.(The cost is inclusive of all fixtures and separate charges for minor T&P's shall not be made)	Sqm	1.68	5423.11	Five Thousand Four Hundred TwentyThree Paise Eleven Only
22	Providing skirting, dadooing, rises of steps with colour glazed tiles 6mm thick on 10mm thick cement plaster 1:3 and jointed with white cement slurry over existing rough plaster surface using glazed tiles of approved make and size including cost of materials, labour, complete as per specifications.	Sqm	51.30	2310.67	Two Thousand Three Hundred Ten Paise SixtySeven Only
23	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ m2 including grouting the joints with white cement and matching pigments etc., complete Size of Tile 600x600 mm	Sqm	37.86	1222.70	One Thousand Two Hundred TwentyTwo Paise Seventy Only
24	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	Each	1.00	4728.24	Four Thousand Seven Hundred TwentyEight Paise TwentyFour Only
25	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :W.C. pan with ISI marked white solid plastic seat and lid.	Each	1.00	5573.44	Five Thousand Five Hundred SeventyThree Paise FourtyFour Only
26	Providing and fixing wash basin with C.I. brackets, 15 mm dia CP Brass single hole basin mixer of approved quality and make, including painting of fittings and brackets, cutting and making good the walls wherever required: using White Vitreous China Wash basin size 550x400 mm with a 15 mm CP Brass single hole basin mixer	Each	2.00	4007.75	Four Thousand Seven Paise SeventyFive Only
27	Providing and fixing brass stop cock of approved quality : 20mm Nominal bore	Nos	2.00	384.18	Three Hundred EightyFour Paise Eighteen Only
28	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete : 25 mm nominal bore	Nos	2.00	427.61	Four Hundred TwentySeven Paise SixtyOne Only
29	Providing and fixing gun metal non- return valve of approved quality (screwed end) :Vertical	Nos	2.00	615.81	Six Hundred Fifteen Paise EightyOne Only

	;ndments and conveying to worksite, rolling and lowering into ;nches, laying true to line and level and perfect linking at joints, testing nd commissioning, including loading unloading at both destinations and cuts of pipes wherever necessary including jointing of PVC pipes and specials (excluding cost of specials) with jointing of approved type, with all labour with all lead & lift including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation etc. complete and giving necessary hydraulic test to the required pressure as per ISS (Contractor will make his own arrangements for procuring water for testing) etc. for: PVC pipes 25mm dia, 10 kg/sqcm & class 5	Mtr	80.00	52.34	FiftyTwo Paise ThirtyFour Only
31	Supplying PVC ringtite pipes conforming to IS 4985:2000 with latest amendments and conveying to worksite, rolling and lowering into trenches, laying true to line and level and perfect linking at joints, testing and commissioning, including loading unloading at both destinations and cuts of pipes wherever necessary including jointing of PVC pipes and specials (excluding cost of specials) with jointing of approved type, with all labour with all lead & lift including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation etc. complete and giving necessary hydraulic test to the required pressure as per ISS (Contractor will make his own arrangements for procuring water for testing) etc. for: PVC pipes 32mm dia., 10 kg/sqcm & class 5	Mtr	50.00	71.27	SeventyOne Paise TwentySeven Only
32	Supplying UNPLASTICISED PVC pipes conforming to IS 16098:2013 with latest amendments ended with integral sockets with ISI mark and conveying to worksite, rolling and lowering into trenches, laying true to line and level and perfect linking at joints, testing and commissioning, including loading and unloading at both destinations and cuts of pipes wherever necessary including jointing of UPVC pipes (with cost of elastomeric sealing rings) and specials (excluding cost of specials) with jointing of approved type, with all labour, lead & lifts, including encasing the pipes alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation etc. complete and giving necessary hydraulic test to the required pressure as per ISS (contractor will make his own arrangements for procuring water for testing) etc. for:Pipes of SN4, 110mm dia.	Mtr	25.00	301.78	Three Hundred One Paise SeventyEight Only
33	Providing and fixing Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete. Hot finished seamless type tubes including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge.	Kg	4730.55	151.45	One Hundred FiftyOne Paise FourtyFive Only
34	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 25x25 mm made of G.I. wire of dia 3 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge.	Sqm	291.50	868.59	Eight Hundred SixtyEight Paise FiftyNine Only

	Providing, providing and erecting in position Hot dip galvanised Gate. using 72*72*4.8mm Sq. GI Pipe frame with top pipe bending in heavy duty hydraolic press with sand packing and hot bending to form double arch as per drawing profile,20mm hot dip galvanised sq.rod for verticals at 150mm c/c, as shown in the drawing including providing hot dip galvanised forged omamental design in between sq.rods and heads at top,middle and bottom. Intermediate supports of 75*12mm and 50*6mm arch bent to hot .dip galvanised flats.the work is inclusive of throughing GI.flat GI sq.rods,placing,welding all the joints including grinding,finishing metal patty,painting wo coats enamel painting.The rate is inclusive of all materials like GI sq.pipe,GI.Sq.rods,GI forged designs etc., heavy duty hinges are made out of 75mm solid sq.block assembled with 20mm dia bearing in the three places for each flop. Heavy duty locking arrangements at low places including cost of labou,pailnting,erecting charges using hoist pulley cranes with all lead and lift,loading,transportation,unloading,scaffolding charges and all other incidental charges for sucessful completion of the work as per directions of the Engineer-in-charge of the work	Sqm	11.97	21613.46	TwentyOne Thousand Six Hundred Thirteen Paise FourtySix Only
36	Demolishing cement concrete manually/ by mechanical means including disposal of material to the appropriate disposal area as per direction of Engineer-in-charge.	Cum	165.82	1418.69	One Thousand Four Hundred Eighteen Paise SixtyNine Only
37	Removing and resetting of kerb stones	Mtr	840.00	119.46	One Hundred Nineteen Paise FourtySix Only
38	Removing and Resetting of Footpath Slab	Sqm	3980.71	237.90	Two Hundred ThirtySeven Paise Ninety Only
39	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately)M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	Cum	1034.98	7314.84	Seven Thousand Three Hundred Fourteen Paise EightyFour Only
40	Providing and fixing precast reinforced cement concrete covering slabs of 10Cm thick made of M20 with OPC cement,with 20mm and down size graded granite metal coarse aggregate @0.70 mixed, Inculding providing and removing centering, shuttering, strutting propping etc., for edges of slabs with TMT steel (Fe500) cost of all materials, labour, all lead and lift, HOM of machinery, curing, including cost of reinforcement etc., complete as directed by the Engineer in charge of the work	Sqm	3625.20	2097.57	Two Thousand NinetySeven Paise FiftySeven Only
41	Providing B S slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete. as directed by the Engineer in Charge of the work (excluding GST and Area Leading Charges)	Sqm	850.84	847.33	Eight Hundred FourtySeven Paise ThirtyThree Only
42	Providing one line dressing to granite stone slab / granite stone masonry as per specifications as directed by the Engineer in Charge of the work (excluding GST and Area Leading Charges)	Sqm	960.84	244.99	Two Hundred FourtyFour Paise NinetyNine Only
43	Providing Machine Cutting edges to B S slab 2.5 cms. wide as per specifications. (only chamfered length shall be recorded) inclusive of all Taxes complete. as directed by the Engineer in Charge of the work (excluding Area Leading Charges)	Rmt	4230.00	394.81	Three Hundred NinetyFour Paise EightyOne Only

	ıt concrete M20 using graded granite jelly 20mm and down size steel reinforcement, including form work, lift charges, curing and crete finished surfaces on both sides etc, complete and as per awing and the directions of Engineer in-charge. (Data Rate)	Sqm	628.59	5099.16	Five Thousand NinetyNine Paise Sixteen Only
	Providing and fixing pre cast solid cement concrete kerb stones made out of M20 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation etc.,complete as directed by the Engineer in Charge of the work (excluding GST and Area Leading Charges)	Nos	7100.00	513.26	Five Hundred Thirteen Paise TwentySix Only
46	Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces	Sqm	1490.72	94.65	NinetyFour Paise SixtyFive Only
47	Providing and laying heavy duty cobble stones 75mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per m2 over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and Usage charges of machinery complete as per specifications.	Sqm	1549.10	1275.04	One Thousand Two Hundred SeventyFive Paise Four Only
48	Supplying, filling, spreading & leveling stone boulders of size range 5 cm to 20 cm, in recharge pit, in the required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge.	Cum	3.90	1069.03	One Thousand SixtyNine Paise Three Only
49	Supplying, filling, spreading &leveling gravels of size range 5 mm to 10 mm, in the recharge pit, over the existing layer of boulders, in required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge.	Cum	2.34	414.25	Four Hundred Fourteen Paise TwentyFive Only
50	Supplying, filling, spreading &leveling coarse sand of size range 1.5 mm to 2 mm in recharge pit, in required thickness over gravel layer, for all leads & lifts, all complete as per direction of Engineer -in-charge.	Cum	2.34	442.09	Four Hundred FourtyTwo Paise Nine Only
51	Gravel packing in tube well construction in accordance with IS: 4097, including providing gravel fine/ medium/ coarse, in required grading & sizes as per actual requirement, all complete as per direction of Engineer-in-charge.	Cum	2.34	445.43	Four Hundred FourtyFive Paise FourtyThree Only
52	Providing and fixing factory made precast RCC perforated drain covers, having concrete of strength not less than M-25, of size 1000 x 450x50 mm, reinforced with 8 mm dia four nos longitudinal & 9 nos cross sectional T.M.T. hoop bars, including providing 50 mm dia perforations @ 100 to 125 mm c/c, including providing edge binding with M.S. flats of size 50 mm x 1.6 mm complete, all as per direction of Engineer-in-charge.	Each	48.00	1324.04	One Thousand Three Hundred TwentyFour Paise Four Only
53	Scarifying the existing bituminous road surface to a depth of 50 mm and disposal of scarified material by Mechanical Means using Hydraulic excavator with in all lifts and lead	Sqm	5041.79	4.45	Four Paise FourtyFive Only
54	Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work.In all kinds of soils upto 300 mm depth	Cum	3088.06	72.38	SeventyTwo Paise ThirtyEight Only

	Construction of Granular Sub-Base of required grading as per design mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per clause 401 For Grading -IV Material	Cum	1867.31	2654.76	Two Thousand Six Hundred FiftyFour Paise SeventySix Only
56	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:5:10 Using 40 mm nominal size graded crushed coarse aggregates(V-I,I No-2.11, P.No-15of KPWD SR 2021-22)	Cum	1477.18	5541.14	Five Thousand Five Hundred FourtyOne Paise Fourteen Only
57	Providing and constructing un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 M30 (Grade), coarse and fine aggregates conforming to IS:383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weigh batcher using approved mix design, laid in approved fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including construction joints, , primer, sealant , curing of concrete slabs for 14- days, and water finishing to lines and grade as per drawing and technical specification clause 1501 with all lead, lifts, loading & unloading charges, cost and conveyance of all materials, labour, equipments etc., complete. as per the directions of the Engineer-in-charge of the work.	Cum	984.79	7613.51	Seven Thousand Six Hundred Thirteen Paise FiftyOne Only
58	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density.	Cum	970.47	2665.90	Two Thousand Six Hundred SixtyFive Paise Ninety Only
59	Providing and applying primer coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical means.	Sqm	3881.87	49.00	FourtyNine Only
60	Providing and applying tack coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.20 kg/m2 on the prepared bituminous surface cleaned with mechanical broom	Sqm	26463.56	13.36	Thirteen Paise ThirtySix Only
61	Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 505 complete in all respects.Dense Graded Bituminous Macadam Grading - II for traffic <20 MSA	Cum	439.25	11012.13	Eleven Thousand Twelve Paise Thirteen Only

	roviding and laying Bituminous Concrete with 40/60 TPH capacity hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 per cent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respects Bituminous Concrete Grading II for traffic <20 MSA	Cum	720.57	12840.49	Twelve Thousand Eight Hundred Fourty Paise FourtyNine Only
63	Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes.Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface	Sqm	841.71	532.28	Five Hundred ThirtyTwo Paise TwentyEight Only
64	Supply and fixing of Retro Reflective Single Arrow Road Name Signboard of size 1600mm x 900mm made out of retro reflective sheeting conforming to Type XI standards of ASTM D 4956-09 & as per IRC 67-2012 for full back ground of blue colour & white letters and fixed over 4 mm thick Aluminium Composite Material sheet having minimum 0.5 mm thick Aluminium skin on both sides with back side painted grey colour and fixed over back support frame SS angle of 15mm x 20mm x 1.2mm, supported by 38mm OD stainless steel pipe all round in 304 grade and 2 nos of vertical posts of 50 mm OD stainless steel pipe of 202 grade firmly fixed to the ground by means properly designed foundation 1 of size 450mm x 450mm x 600mm in 1:1.5:3 ratio cement concrete. The background shall be blue in color with letters and border in white, the item includes earthwork excavation, cost of all materials, loading, unloading, lead, lift, transportation etc., complete. as per direction of engineer in charge of work clause 6.9 of IRC 67-2012 for Type XI retro reflective sheeting from the sheeting manufacturer & a certified copy of test reports from an Independent test laboratory conforming to clause 6.7 of IRC 67-2012 including outdoor weather exposure report for the retro	Nos	87.00	38468.54	ThirtyEight Thousand Four Hundred SixtyEight Paise FiftyFour Only
65	Supplying and Fixing of Molded Shank Raised Pavement Markers / Cat's Eye made of polycarbonate and ABS moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to ASTM D 4280 Type H and complying to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97 DO III Dt 11.06. 1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 +/- 2 mm and with minimum reflective area of 13 cm2 on each side and the slope to the base shall be 35 +/- 5 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 +/- 2 mm and height not less than 30+/- 2 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer.The contractor shall submit a two year warranty for satisfactory field performance including stipulated retro-reflectance of the reflecting panel, to the Engineer.	Nos	80.00	556.78	Five Hundred FiftySix Paise SeventyEight Only
66	Lead for Disposal of Debris	Cum	7449.66	95.76	NinetyFive Paise SeventySix Only

Signature of the Contractor

Executive Engineer,
Yelahanka Division,
BBMP, Bengaluru-64.